## Agency for Healthcare Research and Quality: Prevention Quality Indicators (PQIs)

## Log of Revisions to PQI Documentation and Software

Updated January 9, 2004

The following table summarizes all of the revisions made to the PQIs software, software documentation and the Guide to Prevention Quality Indicators (Guide) document since the original release of these documents in November 2001. The table lists the revision number, the date the revision was made, the component affected by the change and a short summary of the changes that were made. For convenience and ease of use, the changes are listed in reverse chronological order with the most recent changes appearing first in the table. This log of revisions is current as of the date noted above.

Revision number	Date	Component	Changes
3	January 9, 2004	Software (SAS and SPSS) and Guide	Implemented changes associated with ICD-9-CM coding updates from Fiscal Year (FY) 2003 (effective 10-1-2002) and FY 2004 (effective 10-1-2003). See separate documentation on ICD-9 coding updates for specific details.
3	January 9, 2004	Software (SAS and SPSS)	<ol> <li>Angina Admission Rate. The numerator exclusion for patients undergoing any surgical procedure was removed and replaced with a more restrictive exclusion of cardiac procedures, identical to the exclusion list for cardiac procedures included in the CHF Admission Rate and Hypertension Admission Rate Indicators (see below). The rate for the Angina Admission Rate indicator is expected to decrease significantly with this change.</li> <li>CHF Admission Rate, Hypertension Admission rate and Angina Admission Rate. The numerator exclusion of major cardiac surgery was redefined to include only surgeries that would typically be done on an elective or semi-elective basis and therefore represent the indication for admission. This would include valve repair (35.xx), angioplasty and stent placement (36.0x), coronary bypass and other revascularization surgery (36.1x-36.9x), and heart transplantation (37.5).In addition, the list was expanded to include procedures associated with angina, in conjunction with the use of this inclusion in the Angina Admission Rate Indicator. The resulting exclusion is now identical for the three indicators.</li> </ol>
3	January 9, 2004	Software (SAS and SPSS)	<ol> <li>All parameter text files were renamed to refer specifically to the PQI module (e.g., use of PQ in file name). These changes are also reflected in the software documentation.</li> <li>All parameter files were rerun using the updated</li> </ol>

January 9, 2004 Page 1 of 3

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			software and Year 2000 HCUP SID data. 3. Population files for 2000, 2001 and 2002 were reestimated using the latest available census files The treatment of missing data by SPSS was changed
3	January 9, 2004	Software - SPSS	to mirror the treatment of missing data by SAS, specifically the software requires confirmation for the assignment of a poor outcome or negative event. For instance, in order to be assigned as a death, each case must actually be coded as a death. Missing data is considered neutral. Missing data for some elements results in the exclusion of that case from the denominator. For a few other elements, the case is retained. Table 5 of the Software Documentation lists the impact of missing data for each data element.
2	January 10, 2003	Software Documentation (SAS and SPSS)	<ol> <li>Updated documentation to reference the changes made to the software programs such as the change in the default number of ICD-9 diagnosis and procedure codes, the option to stratify area by MSA or county, and instructions for using the patient FIPS code.</li> <li>Modified the data file input specifications to standardize across software programs (SAS and SPSS) so the user would be able to run the same input data file with either statistical package.</li> </ol>
2	January 10, 2003	Software (SAS and SPSS)	<ol> <li>input data file with either statistical package.</li> <li>The county-to-MSA mapping for Waller County in Texas was corrected by assigning the value of 3362 for the Houston-Galveston MSA.</li> <li>The default number of ICD-9-CM diagnoses was changed from 5 to 30.</li> <li>The default number of ICD-9-CM procedures was changed from 4 to 30.</li> <li>The ICD-9 coding was updated to reflect changes through FY 2002 (September 30, 2002).</li> <li>Added the option for the user to select rates calculated by MSA or by county for urban areas (rates for rural areas will always be by county).</li> <li>Additional ASCII text files with Census residential population numbers for 2000 and 2001 were included in the module.</li> <li>Risk-adjustment inputs that were based on nineteen SID state data files from the year 1997 were replaced with numbers that were based on twenty-nine SID state data files from the year</li> </ol>

January 9, 2004 Page 2 of 3

Revision number	Date	Component	Changes
			<ul> <li>2000.</li> <li>8. The formulation of smoothed rates was corrected so that missing values would be generated when appropriate, rather than zeros.</li> <li>9. Hardcopy printouts were modified to be easier to understand (intermediate means were removed, the final means were restricted to just area-level records, prints of the final results were reformatted and labeled).</li> </ul>
2	October 9, 2002	Guide	<ol> <li>The definition for the Perforated appendix admission rate was clarified in appendix A, by moving the ICD-9-CM codes for the population at risk to a separate section that defined the denominator for the rate.</li> <li>The definition of the Low Birthweight indicator was corrected in Appendix A, by removing references to DRG's 370-375.</li> </ol>
1	April 17, 2002	Guide	<ol> <li>The age inclusions for the populations at risk were corrected for the following indicators: bacteria pneumonia, dehydration, urinary tract infection, angina without procedure, CHF, hypertension, adult asthma, COPD, uncontrolled diabetes, diabetes short-term complications, diabetes long-term complications, and lower-extremity amputation among patients with diabetes. In all cases, the descriptions of the indicators in the Guide suggested that the indicator be applied to a specific age group, but suggested that it could be applied to other age groups as well. The software applies the indicator to all relevant age groups; therefore, the Guide was amended to reflect this.</li> <li>For the definition of Lower-Extremity Amputation among Patients with Diabetes, under Outcomes of Interest, "Discharges with ICD-9-CM <i>principal diagnosis</i> codes" was changed to "Discharges with ICD-9-CM <i>procedure</i> codes".</li> </ol>
1	April 17, 2002	Software documentation	The years for which the ICD-9-CM codes defining PQIs are valid was amended to be through FY 2001 instead of FY 2000, that is, the codes in the software are effective through September 30, 2001.

January 9, 2004 Page 3 of 3